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Wright et al.

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[54] METHOD AND APPARATUS FOR GENERATING A PULSE

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[58] Field of Search 713/400, 401, 713/500, 501, 503, 600, 601; 327/172, 173, 174, 181, 291

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[57] ABSTRACT

A circuit for generating a pulse with minimal delay after receiving a trigger signal includes a passgate, a gating circuit, and a reset circuit. The passgate is enabled by control signals received at the gating circuit having a trigger signal as one of the control signals. The trigger signal is also presented as an input to the passgate. When enabled, the passgate propagates the trigger signal to an output. A predetermined time after the trigger signal appears at the passgate input, a passgate control signal is turned off, thereby preventing the trigger signal from further passing through the passgate. The reset circuit is then turned on, which pulls the signal at the output of the passgate to a reference voltage, ending the pulse. Once the pulse is generated, it can be rectified and further combined with other signals to produce signals used in other parts of the circuit.

52 Claims, 6 Drawing Sheets